

# **EXHIBIT 2**

VOLUME 1

Pages 1 - 214

UNITED STATES DISTRICT COURT

NORTHERN DISTRICT OF CALIFORNIA

**Before The Honorable YVONNE GONZALEZ ROGERS, Judge**

EPIC GAMES, INC.,	)	
	)	
Plaintiff,	)	NO. C-20-5640 YGR
	)	
vs.	)	Monday, May 3, 2021
	)	
APPLE, INC.,	)	Oakland, California
	)	
Defendant.	)	BENCH TRIAL
	)	
APPLE, INC.,	)	
	)	
Counterclaimant,	)	
vs.	)	
	)	
EPIC GAMES, Inc.,	)	
	)	
Counter-Defendant.	)	
	)	

REPORTER'S TRANSCRIPT OF PROCEEDINGS

APPEARANCES:

For Plaintiff:	CRAVATH, SWAINE & MOORE, LLP
	825 Eighth Avenue
	New York, New York 10019
<b>BY:</b>	<b>KATHERINE B. FORREST, ESQUIRE</b>
	<b>GARY A. BORNSTEIN, ESQUIRE</b>
	<b>YONATAN EVEN, ESQUIRE</b>

(Appearances continued.)

Reported By:	Diane E. Skillman, CSR 4909, RPR, FCRR
	Official Court Reporter

TRANSCRIPT PRODUCED BY COMPUTER-AIDED TRANSCRIPTION

**DIANE E. SKILLMAN, OFFICIAL COURT REPORTER, USDC**

For Plaintiff:

CRAVATH, SWAINE & MOORE, LLP  
825 Eighth Avenue  
New York, New York 10019

**BY: LAUREN A. MOSKOWITZ, ESQUIRE  
JUSTIN C. CLARKE, ESQUIRE  
M. BRENT BYARS, ESQUIRE**

For Defendant:

GIBSON, DUNN & CRUTCHER  
333 South Grand Avenue  
Los Angeles, California 90071

**BY: RICHARD J. DOREN, ESQUIRE  
DAN SWANSON, ESQUIRE  
CYNTHIA RICHMAN, ESQUIRE**

GIBSON, DUNN & CRUTCHER, LLP  
2001 Ross Avenue, Suite 1100  
Dallas, Texas 75201

**BY: VERONICA S. MOYE, ESQUIRE**

PAUL WEISS RIFKIND  
WHARTON & GARRISON LLP  
2001 K STREET, NW  
Washington, DC 20006

**BY: KAREN DUNN, ESQUIRE  
JESSICA E. PHILLIPS, ESQUIRE**

1     **A.** In the fourth paragraph I say, we hope Apple will also  
2     make these options equally available to all iOS developers  
3     in order to make software sales and distribution on the iOS  
4     platform as open and competitive as it is on personal  
5     computers.

6     **Q.** What was the purpose for the reference to "side letter" in  
7     this document DX4477?

8     **A.** My understanding is Epic was under a contract of adhesion,  
9     a nonnegotiable contract. And before going -- essentially  
10    going to war with Apple over the policies, I felt that Epic  
11    should make all attempts we could in order to seek an agreed  
12    resolution to our concerns.

13           **MR. DOREN:** Objection, Your Honor. Move to strike as  
14    a statement of legal conclusion.

15           **THE COURT:** Overruled. He can testify as to his  
16    belief.

17           **MR. DOREN:** Thank you, Your Honor.

18    **BY MS. FORREST:**

19    **Q.** Let's talk about Project Liberty. What was Project  
20    Liberty?

21    **A.** Project Liberty was Epic's -- was the code name used  
22    internally within Epic to refer to our overarching effort to  
23    challenge Apple's and Google's smartphone policies.

24    **Q.** When did Project Liberty start?

25    **A.** The idea for Project Liberty developed throughout 2019.

1 We began making significant planning and preparations for it  
2 in early 2020. And by around the first quarter of 2020, had  
3 made our plan of record to pursue Project Liberty and to  
4 challenge Apple and Google.

5 Q. And did Epic make any preparations in connection with  
6 Project Liberty?

7 A. Yes. We spent many months on extensive preparation  
8 throughout many different parts of our company.

9 Q. Why?

10 A. We were challenging the two most powerful companies in the  
11 world. It would have been foolish to do anything less.

12 Q. Let's talk about what happened on August 13, 2020. What  
13 happened on that day with regard to the *Fortnite* app on iOS?

14 A. Epic had prepared a hot fix, basically a server-side  
15 change --

16 Q. Hold on one second. The court reporter, I think, didn't  
17 quite get that.

18 A. Hot fix, which is a server-side configuration change made  
19 by Epic which instructs the *Fortnite* software that was already  
20 on the users' devices to change its configuration in some way.

21 We make a lot of hot fixes, but this one was very unlike  
22 all the others in that this hot fix enabled Epic's direct  
23 payment system to become available on iOS, which we did at  
24 5:00 a.m. Eastern Time on August 13, 2020.

25 Q. Stop there for a moment, and let me just ask you to tell

1 Q. Thank you.

2 Mr. Sweeney, let's talk for a few minutes, and --

3 THE COURT: Okay. Can I make sure our record is  
4 clear? Are you moving 4361?

5 MR. DOREN: Thank you, Your Honor. I would have  
6 gotten there eventually. May I please move -- first of all,  
7 DX3818 into evidence, if I haven't done that.

8 THE COURT: You haven't. So 3818 is admitted, but  
9 we'll wait until I hear from Ms. Forrest --

10 MR. DOREN: Thank you, Your Honor.

11 THE COURT: -- after lunch.

12 MR. DOREN: And I would also move to admit DX4361.

13 THE COURT: I assume no objection.

14 MS. FORREST: No objection, Your Honor.

15 THE COURT: 4361 is admitted.

16 (Defendant's Exhibit 4361 received in evidence)

17 MR. DOREN: Thank you, Your Honor.

18 BY MR. DOREN:

19 Q. Mr. Sweeney, you testified yesterday that by the spring of  
20 2020 you had initiated Project Liberty, correct?

21 A. We were in the planning and preparation phases of at that  
22 point.

23 Q. Okay. And by that time you had hired your lawyers who  
24 helped you implement that, correct?

25 A. By spring, yes.

1 Q. And those are the lawyers who are representing you in this  
2 lawsuit?

3 A. Yes.

4 Q. And you'd also, in the spring, you hired a public  
5 relations firm, correct?

6 A. Yes.

7 Q. And by May 2020 you had settled on your strategy regarding  
8 a hot fix, correct?

9 A. At that point we had a plan of record that included the  
10 hot fix.

11 Q. And, sir, if you could please take a look at Exhibit 4419,  
12 DX4419.

13 Do you have that exhibit in front of you?

14 A. Yes.

15 Q. And do you recognize this to be an internal Epic email  
16 chain from May 11, 2020?

17 A. Yes.

18 Q. And the first email at the top of the first page is  
19 actually from a gentleman named Mark Rein, correct?

20 A. Yes.

21 Q. And he is the cofounder of Epic Games?

22 A. Yes. He joined Epic in 1992.

23 Q. And he owns about 4 percent of the company?

24 A. Thereabouts.

25 Q. If we can go back, please, to the first email in this

1 **BY MR. DOREN:**

2 **Q.** Mr. Sweeney, you use an iPhone, correct?

3 **A.** Yes.

4 **Q.** People have given you -- particularly I would think a  
5 person in your position, people have given you Android  
6 devices, correct?

7 **A.** Yes.

8 **Q.** And you've given those away, right?

9 **A.** I have.

10 **Q.** You prefer the iPhone?

11 **A.** Yes.

12 **Q.** You love the aesthetics of the hardware, true?

13 **A.** Yes.

14 **Q.** You like the operating system, correct?

15 **A.** I like many aspects of the operating system.

16 **Q.** And you believe that the iPhone is a premium product,  
17 correct?

18 **A.** Yes.

19 **Q.** And you understand that user privacy and security are  
20 fundamental competitive differentiators for Apple, correct?

21 **A.** Yes.

22 **Q.** And you personally prefer to use iPhone because Apple's  
23 approach to maintaining your privacy, Mr. Sweeney, is superior  
24 to Google's, correct?

25 **A.** That's among the reasons.



1 Q. And among the reasons that you use an iPhone is because  
2 Apple's approach to customer data security is superior to  
3 Google's as well, correct?

4 A. Yes.

5 Q. And when I say "Google," you understand I'm referring  
6 generally to the Android devices, correct?

7 A. Yes.

8 Q. And you value those qualities, the safeguarding of your  
9 privacy and your data, true?

10 A. Yes.

11 Q. And if Apple were to compromise those fundamental  
12 differentiators, it would lose a significant competitive  
13 advantage over Android devices, wouldn't it?

14 A. I think I would need to know about specific changes it  
15 would make to judge whether they would make the platform more  
16 or less competitive.

17 MR. DOREN: Thank you, Your Honor. I pass the  
18 witness.

19 THE COURT: Okay. Redirect.

20 We will go, Ms. Forrest, for another eight minutes before  
21 our break.

22 MS. FORREST: Thank you, Your Honor.

23 REDIRECT EXAMINATION

24 BY MS. FORREST:

25 Q. Good morning, Mr. Sweeney.

**KOSMYNKA - CROSS RESUMED - MOYÉ**

1 and purchase flows, the ability to communicate with their  
2 friends, find their friends, this is all core to the overall  
3 Roblox app experience, Roblox app itself, and so the  
4 experiences that would have been enabled by a customer are  
5 bounded and unable to do things outside of what Roblox itself  
6 is capable of doing.

7 **Q.** What was the conclusion with respect to whether Roblox  
8 enabled users to download additional features and  
9 functionality?

10 **A.** It's compliant with that rule.

11 **Q.** And what -- because why, Mr. --

12 **A.** Because it does not introduce new features and  
13 functionality.

14 **Q.** Do you believe, Mr. Kosmynka, that allowing a store within  
15 a store on the App Store would create safety issues?

16 **A.** Absolutely.

17 **Q.** And can you explain why?

18 **A.** So users, when they buy an iPhone or an iPad -- thinking  
19 about my kids -- when this do this, they expect to go to the  
20 App Store and get safe and trusted apps. There are absolutely  
21 cases where, whether it be through advertising or other ways  
22 to get in touch with a particular user, that they could be  
23 manipulated into an experience that they think is safe and  
24 trusted on the surface, and then you go deeper into that  
25 experience and realize that actually none of the content is

**KOSMYNKA - CROSS RESUMED - MOYÉ**

1 reviewed, none of the software is reviewed, and that has  
2 severe ramifications for security, privacy, and customer  
3 safety.

4 **Q.** Thank you, Mr. Kosmynka.

5 And just a couple of questions about TestFlight, the  
6 company you founded. I neglected to ask you, when was  
7 TestFlight founded?

8 **A.** My daughter was around -- it was ten years, 2010.

9 **Q.** Thank you.

10 And when was TestFlight acquired by Apple?

11 **A.** I believe it was 2013.

12 **Q.** And was the functionality of TestFlight changed after it  
13 was acquired by Apple?

14 **A.** Absolutely.

15 **Q.** Is TestFlight, as it functions today -- is it the same as  
16 TestFlight as it functioned when it was rejected during the  
17 app submission process that you undertook prior to joining  
18 Apple?

19 **A.** No.

20 **Q.** Thank you, Mr. Kosmynka.

21 Let's talk about your App Review team.

22 And we have a demonstrative that will help us walk through  
23 this.

24 First, can you tell us what are the functionalities that  
25 happen in the iOS, macOS, tvOS, watchOS, and TestFlight area

**KOSMYNKA - CROSS RESUMED - MOYÉ**

1 **Q.** What is the purpose, Mr. Kosmynka, of App Review?

2 **A.** So I think I'm a huge beneficiary of a long history of the  
3 vision that the App Store started with. It's codified here in  
4 the guidelines. When I have, say, all-hands or any  
5 cross-functional meeting, when I'm talking to my team directly  
6 and I want to communicate the vision and the mission and what  
7 the purpose of App Review is, I simply take this language from  
8 the guidelines and put that at the beginning of the deck  
9 because this is the purpose. We want to make sure that the  
10 App Store is a great place for customers to find safe and  
11 trusted apps and a great opportunity for all developers.  
12 That's the entire mission.

13 **Q.** And if we could have a blowout of the first sentence under  
14 "introduction." Is this the sentence you were referring to,  
15 Mr. Kosmynka?

16 **A.** Yeah. "The guiding principle of the App Store is simple.  
17 We want to provide a safe experience for users to get apps and  
18 a great opportunity for all developers to be successful."

19 **Q.** I'd like to walk through a few of the guidelines and give  
20 the Court a sense of the type of app submissions that end up  
21 being rejected because they don't comply with that guideline.  
22 And let's start first with Guideline 1.1 on safety. It's  
23 "Objectionable Content."

24 And the language here is, "Apps should not include content  
25 that is offensive, insensitive, upsetting, intended to

**KOSMYNKA - CROSS RESUMED - MOYÉ**

1 **A.** Yes.

2 **Q.** How many app submissions were rejected for a privacy  
3 guideline violations in 2020, Mr. Kosmynka?

4 **A.** 215,000.

5 **Q.** And how many were rejected for privacy violations in 2019?

6 **A.** I believe it was 150,000.

7 **Q.** And how many app submissions -- submissions of new apps  
8 were rejected overall in 2020?

9 **A.** I think that was a million in 2020.

10 **Q.** And in 2020, how many rejections were there for app  
11 updates?

12 **A.** I believe that was another million.

13 **Q.** Were new developers able to get their apps submitted and  
14 on the App Store in 2020?

15 **A.** Yes.

16 **Q.** And do you have a number of how many?

17 **A.** I said previously that we worked with 150,000 developers  
18 that for the first time were submitting an app to the App  
19 Store. A large number of those would have made it to the  
20 store, but also that one million new apps that were rejected,  
21 the vast majority of those make it to the store as well. As I  
22 said, we're a developer relations organization. Our goal is  
23 to work with developers and resolve issues, and so in the case  
24 of some privacy guideline violations, if it's not clear and  
25 transparent and makes sense to the customer, that would be a

1                   **MR. SWANSON:** Thank you.

2                                   **CROSS-EXAMINATION**

3           **BY MR. SWANSON:**

4           **Q.** So, Dr. Evans, let's focus on 2019.

5                   You would agree, wouldn't you, that Apple's iPhone and  
6           iPad revenues were over \$160 billion?

7           **A.** I don't have those numbers firmly in mind. If you  
8           represent that, I don't have any reason to disagree.

9           **Q.** Well, I'll certainly represent that in your preliminary  
10           injunction declaration at paragraph 19, you had a figure of  
11           over \$160 billion. I could make other representations, as  
12           well, but does that generally refresh your recollection on the  
13           order of magnitude?

14           **A.** It doesn't really refresh my recollection. That was a  
15           while back that I wrote that, but I have no reason to believe  
16           that what you just said is not right.

17           **Q.** Okay. Thank you.

18                   And Apple's App Store revenues were about \$13.5 billion in  
19           2019, correct? That's in your direct testimony?

20           **A.** That's correct.

21           **Q.** Now, you recall from your opening report that the  
22           operating profits from the sale of iPhones and iPads in  
23           2019 were \$35.8 billion, right? You had that figure in your  
24           own reports.

25           **A.** Okay. I accept that.

1 order to have the kind of success that it's had, it needed to  
2 open the store, over Mr. Jobs' initial objection; isn't that  
3 right?

4 **A.** I'm unaware of the internal debate, but that is -- that is  
5 certainly what happened.

6 **Q.** Okay.

7 **A.** It could --

8 **Q.** Thank you?

9 **A.** -- have engaged in --

10 **Q.** Thank you.

11 **MR. SWANSON:** Your Honor, can Professor Schmalensee  
12 be allowed to finish his answers?

13 **THE COURT:** You have -- he's a world-renowned expert.  
14 I am sure he has dealt with cross-examination before. He  
15 seems to be managing just fine. You'll have redirect.

16 Proceed.

17 **BY MR. BORNSTEIN:**

18 **Q.** And I'll do my best not to be rude, so I'd just appreciate  
19 if I have an answer to the question, and Mr. Swanson will give  
20 you an opportunity to expound, if -- if that's appropriate.

21 **A.** I recognize that.

22 **Q.** Thank you. I thought we did well last time. Hope we do  
23 well again.

24 **A.** It was a civilized deposition. I will say that.

25 **Q.** Thank you.

1 found that the client-side OS is mostly responsible for  
2 security. But as we were talking about with the opposing  
3 counsel, there is this issue of content moderation or copycat  
4 app, or things like that. It's important to note that opening  
5 up iOS to third-party app stores doesn't mean we can't have  
6 some of the other properties like checking for copycat apps or  
7 content moderation or things like that.

8 My only claim is that if we were to allow those  
9 third-party distribution channels, we wouldn't be punting on  
10 the security issues because the security issues are mostly  
11 enforced by the OS, which would be there regardless of the  
12 distribution channel.

13 **THE COURT:** But in the industry today, is there  
14 anybody who does it better for comparison?

15 **THE WITNESS:** I think -- no. I don't know anyone who  
16 I could point to definitively and say, ah-huh, they definitely  
17 do it better in all cases.

18 **THE COURT:** Thank you.

19 **MR. CLARKE:** No further questions.

20 **THE COURT:** Recross limited to the scope of redirect?

21 **RECROSS-EXAMINATION**

22 **BY MR. LO:**

23 **Q.** Professor Mickens, you mentioned Sesame Street as an  
24 example of a store that would be able to curate apps and  
25 content.



1 is completely involved in the definition, creation, and  
2 management of all of our products. So it is absolutely part  
3 of the official process in making a product that product  
4 marketing is involved from the very beginning.

5 **Q.** Thank you.

6 And when did Apple start developing the iPhone?

7 **A.** In 2004.

8 **Q.** And when did the -- when was the first iPhone released?

9 **A.** 2007.

10 **Q.** And, sir, if you could please turn to Exhibit DX3426 in  
11 your binder.

12 **A.** Yes. I have that open.

13 **Q.** Thank you.

14 And do you recognize this document?

15 **A.** Yes, I do.

16 **Q.** What is it?

17 **A.** This is our press announcement launching the iPhone.

18 **Q.** And the date is January 9, 2007; correct?

19 **A.** Yes, it is.

20 **Q.** And the press release states, "Apple today introduced  
21 iPhone combining three products -- a revolutionary mobile  
22 phone, a widescreen iPod with touch controls, and a  
23 breakthrough internet communications device with desktop  
24 class, email, web browsing, searching and maps -- into one  
25 small and lightweight handheld device."

1 Can you explain what is being described here in terms of  
2 the thought process underlying the creation of the iPhone?

3 **A.** Yes. When we were working on the iPhone, we had a few  
4 goals in mind, things we were trying to accomplish. One was  
5 we had had a -- our first real successful consumer electronic  
6 device, the iPod, and the iPod was a breakthrough music  
7 player, particularly at a time when -- when these music  
8 players were transitioning from an old way, mechanical devices  
9 like CD players, to new generation digital devices that had  
10 software and computer chips in them, and it was a whole new  
11 class of device.

12 So we were thinking about what would be another class of  
13 device Apple could innovate and again as it transitions from  
14 an old-styled product to a new generation software and  
15 hardware-driven product. So that was one part of what we were  
16 working on.

17 The second was we did have the iPod. It was a very  
18 successful product at Apple, and we knew that one day people  
19 might start to put their music on their phones and carry it  
20 with them, and in that case, there wouldn't be the need for an  
21 iPod, so we thought if anyone is going to kill the iPod, we  
22 should do it ourselves with a new generation product.

23 And then third, the mobile devices we had at the time that  
24 were somewhat smarter, like BlackBerrys and things, were not  
25 very good at the internet. They could do email, they could do

1       messaging, but in terms of web browsing and the internet,  
2       those were not experiences that were good on mobile yet. So  
3       those were the -- sort of the three leading functions we were  
4       trying to create with iPhone: A new generation phone, a  
5       replacement for iPod functionality, and the internet in your  
6       pocket.

7       **Q.** And you mentioned BlackBerry. Prior to the launch of the  
8       iPhone, were there other mobile devices on the market?

9       **A.** Yes.

10      **Q.** Did any of them combine the features you just described?

11      **A.** No.

12      **Q.** And did Apple develop -- and, Your Honor, I would move,  
13      please, Exhibit 3426 into evidence.

14               **MS. FORREST:** No objection.

15               **THE COURT:** Admitted.

16               (Defense Exhibit 3426 received in evidence)

17      **BY MR. DOREN:**

18      **Q.** And, Mr. Schiller, did Apple develop a unique operating  
19      system for the iPhone?

20      **A.** Yes.

21      **Q.** And what were some of the technical challenges in doing  
22      that?

23      **A.** We wanted to offer up for the first time an advanced  
24      operating system for creating these rich experiences on a  
25      mobile device, but what we had to work with previously, macOS,

1 was not appropriate at all. It was very large, it required a  
2 lot of resources, storage, memory, compute power. It wasn't  
3 very efficient for battery life in the way we would need for a  
4 phone. It didn't connect at all with cellular networks or do  
5 phone calling in any regard at all, and so what the team had  
6 to do was redesign the operating system and start from  
7 scratch, strip it down, remove everything they could to make  
8 it work on a small device, and then build it up to the  
9 capabilities that an iPhone would need.

10 **Q.** And were there any concerns specific to the fact that this  
11 device was to be a mobile phone?

12 **A.** Absolutely.

13 **Q.** And can you describe those concerns, please.

14 **A.** There were many. As I said, one is it had to be a phone,  
15 and it sounds simple, but a phone you rely on for making phone  
16 calls and being connected and available to use all the time.  
17 Other applications or uses can't get in the way of that  
18 capability. It's -- it's core to it.

19 Secondly, it needs to work completely wirelessly on  
20 cellular networks. Again, easy sounding thing, but on an  
21 advanced new operating system and platform, pretty hard to  
22 build and test as a global product that can roam from cell  
23 tower to cell tower and stay connected, especially with data  
24 uses as well.

25 And then of course it has to have small size, great

1 battery life while being a new generation powerful platform.  
2 So there are many considerations that went into it, and  
3 probably the most important of all of course is the security  
4 and privacy issues. You're carrying this around in your  
5 pocket.

6 **Q.** And can you describe a bit more the thought process around  
7 the security and privacy issues, please.

8 **A.** Yes. The idea of this new computing device in your pocket  
9 means it's capable of more new things. It's going to store  
10 information around in our life that we're not used to having  
11 all the time in our pocket. Simple example of course being  
12 location data, knowing where you are, when you are, how long  
13 you're in places is extremely personal, so these are highly  
14 personal devices with a growing amount of information  
15 available everywhere you go, roaming on other networks  
16 everywhere you go.

17 **Q.** Thank you.

18 And does Apple license iOS to third parties?

19 **A.** No.

20 **Q.** And why not?

21 **A.** That's, you know, not the business we're in. Apple always  
22 considers ourselves not a hardware company, not a software  
23 company, but a product company. We make a product as a  
24 complete experience of the hardware and software working  
25 together to create a unique offering in the market. And as

1 of that. You used to pay by what is called "facings." If you  
2 have room for one box, two boxes, or three boxes, the more  
3 facings, the better chance of a sale. You paid for things  
4 called end caps to be able to market at the end of the row of  
5 an aisle. You paid for weekend flyers. This was actually one  
6 of the biggest demand drivers, was whether you paid for a  
7 quarter, half-page, full-page ad in the weekend flyers that we  
8 all got in our mailboxes back then. You had to cover all the  
9 returns when you updated your software. On and on. There are  
10 just many elements of that distribution.

11 **Q.** And what was the cost to the developer of that system?

12 **A.** Typically we'd see that the channel would get between 50  
13 to 70 percent of the sale.

14 **Q.** And did that system remain the dominant means of  
15 distribution for some years after the iPhone launched?

16 **A.** It did.

17 **Q.** Were there any third-party native apps on the iPhone when  
18 it launched?

19 **A.** No.

20 **Q.** And was that a conscious decision on the part of Apple  
21 management?

22 **A.** Yes.

23 **Q.** What was the reasoning behind that decision?

24 **A.** We thought that we wanted to create an Apple experience  
25 with some built-in native apps from Apple and that the

1 security and privacy risks of opening it up to other native  
2 apps was too great and not something that we could solve when  
3 we launched the iPhone, so instead, we offered up the idea of  
4 web apps.

5 **Q.** When you say the risk was too great, what do you mean?

6 **A.** I mean that it was too great to -- first of all, the  
7 quality of the product. We're trying to deliver our first  
8 generation iPhone with an entirely new operating system and  
9 architecture. Getting that done was a huge task. There just  
10 wasn't time to consider many third-party APIs and tools and  
11 distribution.

12 Secondly was the security issues we've been talking about.  
13 That unlike the Mac, which we were making at the time, we  
14 believed that the risk of security and privacy for iPhone  
15 users would be dramatically greater, and we did not yet know  
16 how to solve for those and didn't have a program yet to deal  
17 with it.

18 **Q.** And did the first iPhone include any native apps at all?

19 **A.** Just from Apple.

20 **Q.** And can you describe what those apps were?

21 **A.** Sure. There are many apps that we're familiar with today.  
22 The phone app was an app experience, the Safari for browsing  
23 the web, calendar, email, messages.

24 **Q.** And at some point, did Apple decide to permit third-party  
25 native apps on the App Store?

1       **A.** Yes, we did.

2       **Q.** Presumably that's what we are all here to discuss this  
3 month.

4               Were you involved in that decision, sir?

5       **A.** Yes.

6       **Q.** And when was that decision made?

7       **A.** Shortly after bringing to market the first iPhone, getting  
8 it out into the world and to customers' hands, we then saw it  
9 was helping the world and heard feedback that led us to decide  
10 to make native app distribution a plan for the iPhone.

11       **Q.** And you mentioned what was going on in the world and  
12 receiving feedback. Can you describe for us what the basis  
13 for the decision was to take steps to facilitate third-party  
14 native apps?

15       **A.** Yes. There are two things I recall from that time.

16               Number one, we did start to hear more feedback from  
17 developers that they wanted the opportunity to create native  
18 apps, not just web apps.

19               And secondly, we saw users and developers starting to try  
20 anyway. They were creating what's called "jailbreaking," a  
21 way to sideload software onto iPhone, and they were writing  
22 apps without any documented APIs to build with that were  
23 creating great quality risks, so we saw this beginning of  
24 demand and quality and security risks on the iPhone.

25       **Q.** Is there anything wrong with jailbreaking in terms of your



1 software, resources like the APIs that we have been talking  
2 about, developer tools like Xcode. It includes documentation  
3 to help understand the APIs and their functions. Often has  
4 sample code to help a developer start to write their  
5 application or learn how to use an API.

6 **Q.** And do the Software Development Kits -- are they made up  
7 of Apple's intellectual property?

8 **A.** Yes.

9 **Q.** Does Apple require that its SDK's be used to develop apps  
10 for iOS?

11 **A.** Yes.

12 **Q.** And does that remain the case today?

13 **A.** Yes.

14 **Q.** And who develops SDKs at Apple?

15 **A.** We have a software engineering team, a tools team, that  
16 works under our head of software engineering.

17 **Q.** In terms of this initial SDK, how significant an effort  
18 was that?

19 **A.** Tremendous.

20 **Q.** Can you describe that a bit, please.

21 **A.** For the better part of a year, the entire software  
22 organization was working to create and document the APIs as  
23 well as make the tools work with these new APIs on this new  
24 platform for developers.

25 **Q.** And was the cost of that development work allocated to the

1     **A.** This is our developer agreement.

2     **Q.** And the "Apple Developer Agreement" is what it's entitled?

3     **A.** Yes.

4     **Q.** And are the terms of this agreement standardized?

5     **A.** They are.

6     **Q.** And are large developers able to negotiate more favorable  
7 terms than small developers?

8     **A.** No, they cannot.

9     **Q.** And what -- first of all, what's the purpose of this  
10 document; in other words, who does Apple enter into this  
11 contract with?

12    **A.** So this is an agreement for anyone who wants to start  
13 developing with our tools and software. They get access to  
14 our developer website and all of the content we have within  
15 there and access to many of our tools they want to download  
16 like our Xcode developer tools to begin development.

17    **Q.** And is this license targeted at people that want to put  
18 apps on the App Store specifically?

19    **A.** Not specifically.

20    **Q.** So what sorts of developers are there that don't want to  
21 put -- or would enter into this agreement alone?

22    **A.** Well, you could be a developer who's just learning to  
23 develop and you want to start learning to code, and this would  
24 be your first agreement and -- to get started. Or you could  
25 be all the way to a large enterprise developer creating

1 internal applications within your company, and, again, this  
2 may be what you need to get going and get your apps developed.

3 **Q.** Now, does Apple charge those developers a fee for access  
4 to the tools provided under the Apple Developer Agreement?

5 **A.** No.

6 **Q.** Does anyone pay a fee for the tools provided under the  
7 Apple Developer Agreement?

8 **A.** No.

9 **Q.** And if you could look, please, sir, at Exhibit 2622. This  
10 document is entitled "Xcode and Apple SDKs Agreement." Do you  
11 see that?

12 **A.** Yes.

13 **MR. DOREN:** And, Your Honor, I believe this is also  
14 admitted.

15 **THE COURT:** Yes, it is.

16 **BY MR. DOREN:**

17 **Q.** And could you please describe the purpose of this  
18 contract.

19 **A.** Well, this is a developer -- software development  
20 agreement for somebody who wants to get access specifically to  
21 these tools and a license to use these tools.

22 **Q.** And is there any charge to the developers for access to  
23 these tools under this contract?

24 **A.** No.

25 **Q.** And do the two contracts we look at -- we've just looked

1 at -- do they restrict the use of Apple's intellectual  
2 property?

3 **A.** Yes.

4 **Q.** And is acceptance of those restrictions required for use  
5 of Xcode?

6 **A.** Yes.

7 **Q.** And Apple's SDKs?

8 **A.** Yes.

9 **Q.** Now, since 2008, how many developers have entered into the  
10 developer agreement with Apple?

11 **A.** I don't know the cumulative total. I know the total right  
12 now. We're at the point where we've got over 30 million  
13 developers who have entered the Apple Developer Agreement.

14 **Q.** So just to be clear, there are 30 -- over 30 million  
15 developers that have had free access to Apple's Xcode and SDKs  
16 and the other tools provided under these contracts?

17 **A.** Yes.

18 **Q.** And if you could please look at PX2619. And this document  
19 is -- and, Your Honor, I believe 2619 is also admitted.

20 **THE COURT:** It is.

21 **MR. DOREN:** Thank you, Your Honor.

22 **Q.** And, Mr. Schiller, this document is entitled "The Apple  
23 Developer Program License Agreement"; correct?

24 **A.** Yes.

25 **Q.** And what is the purpose of this contract?

1     **A.** This gives developers access to additional sets of tools  
2     and resources and technologies to develop apps, and it also  
3     gives them the ability to then submit those apps to the App  
4     Store and get support for managing their apps on the App  
5     Store.

6     **Q.** So is this contract required or entering into this  
7     contract required by developers who wish to place apps on the  
8     App Store?

9     **A.** Yes.

10    **Q.** And how many people are current -- are currently enrolled  
11    in the Apple Developer Program License Agreement? Let me  
12    rephrase that.

13           How many developers are currently enrolled in this  
14    contract?

15    **A.** We have approximately one million.

16    **Q.** And are the terms of this contract standardized for all  
17    developers?

18    **A.** Yes.

19    **Q.** And are larger developers able to negotiate more favorable  
20    terms than small developers?

21    **A.** No.

22    **Q.** And you've described it generally, but when comparing the  
23    first contract we looked at, the developer -- the Apple  
24    Developer Agreement, compared to the Apple Developer Program  
25    License Agreement, what additional tools or APIs in general

1 are received under this contract?

2 **A.** You get access to more beta or pre-released software  
3 through this program. You get access to some additional APIs  
4 that have service components to them like push notifications  
5 or HealthKit. They have extra security concerns as well. Or  
6 Apple Wallet and Apple Pay so there is some extra things that  
7 take additional work to support.

8 You also get access to TestFlight for distributing and  
9 testing software. And tools for the App Store. For example,  
10 for managing your apps on the store, running marketing  
11 campaigns on the store, getting data analytics about how your  
12 apps are running on the store. Those are all the kinds of  
13 things that are additionally covered with this program  
14 agreement.

15 **Q.** And do the terms of this license agreement restrict the  
16 developers' use of those tools?

17 **A.** Yes.

18 **Q.** And are those restrictions a condition of entry into this  
19 contract?

20 **A.** Yes.

21 **Q.** And is there a cost to developers who enter into the Apple  
22 Developer Program License Agreement?

23 **A.** Yes.

24 **Q.** And what is that cost?

25 **A.** \$99.

1     **A.** We've created some facilities around the world where more  
2     advanced developers can come in and take part in programs led  
3     by Apple to help them make their apps better and take  
4     advantage of newer technologies.

5     **Q.** And are those programs charged against the App Store in  
6     any way?

7     **A.** No, they're not.

8     **Q.** And we talked earlier about free apps, and roughly what  
9     percentage of apps were free in the early years of the App  
10    Store?

11    **A.** In the beginning, it was closer to 50 percent of the apps  
12    were free.

13    **Q.** And today, what percentage of apps in the App Store are  
14    free?

15    **A.** 84 percent.

16    **Q.** And what percentage of game apps are free today?

17    **A.** Approximately 75 percent.

18    **Q.** Now, we've heard talk about premium and paymium and paid  
19    downloads. So when you say free games, what specifically are  
20    you referring to?

21    **A.** Simply completely free, that there is no charge to the  
22    user or in-app charges.

23    **Q.** And do developers pay any sort of commission to Apple to  
24    distribute their free apps?

25    **A.** No, they do not.

1       **A.** Again, if they ask the user, yes.

2       **Q.** And if the user consents, can that developer then send  
3 email communications directly to that person and other users  
4 of the game?

5       **A.** Yes.

6               **MR. DOREN:** Your Honor, I'd also move DX5555 in,  
7 please.

8               **MS. FORREST:** No objection.

9               **THE COURT:** Admitted.

10              (Defendant's Exhibit 5555 received in evidence)

11       **BY MR. DOREN:**

12       **Q.** Mr. Schiller, earlier today, we -- we touched upon app  
13 review. Do you remember that topic generally?

14       **A.** Yes.

15       **Q.** Why doesn't Apple permit third parties to conduct their  
16 own app review?

17       **A.** Well, first, we feel responsibility to our customers to  
18 make the store safe and responsibility to make sure the apps  
19 that are on the store follow the rules and all the rules apply  
20 to all the developers the same way. And that's how we set it  
21 up from the very first day.

22              And I -- I think we have a strong interest at Apple to  
23 make sure that our users are protected and safe on the devices  
24 that we create for them.

25       **Q.** And why does Apple care so much about app review?



1     **A.** It's a critical part of trying to make the store safe and  
2     fair. It's the best way we could come up with, in addition to  
3     the other systems and tools, we have to make it safe and fair.

4     **Q.** We've also heard the phrase in this trial, "store within a  
5     store." Do you know that phrase?

6     **A.** Yes, I do.

7     **Q.** Why doesn't Apple permit stores within stores, within its  
8     store, should I say?

9     **A.** There are -- there are a few reasons. It -- if -- if apps  
10    are being delivered in -- from another developer through a  
11    store, number one, those apps don't -- haven't taken out a  
12    license with Apple, haven't committed to any of the terms that  
13    we've set up to make our systems safe for us and our users.

14         Those apps don't have to follow any guidelines or rules  
15    and therefore can create problems for us and the users.

16         And there would be no integration across our systems, our  
17    store systems and our -- and our iPhone itself counts on  
18    things that -- that happen through the App Store.

19         The store within a store, you wouldn't get parental  
20    controls through your iPhone.

21         And there are many other examples.

22    **Q.** And is it important to Apple to have a consistent --  
23    consistent information about each game presented to its users?

24    **A.** Yes. I -- I think one of the important features of the  
25    App Store is the actual product page that we present where you

1 things. And it is made up of multiple games. It's not one  
2 game. And the idea of who creates them and what they're for  
3 is a new phenomenon in our industry, at least as far as I'm --  
4 I'm aware. There may be a few other examples, but it's pretty  
5 new stuff.

6 **Q.** And do each of the new games that are included in Roblox,  
7 are they required to go through app review?

8 **A.** No.

9 **Q.** Why not?

10 **A.** Well, it gets to a concept that's again pretty new of  
11 creator versus developer. And I apologize if this is a little  
12 complicated, but the developer of the Roblox app is the Roblox  
13 Corporation. They create the Roblox app. And they must  
14 submit it for review and follow the guidelines, and the  
15 content within it must follow the guidelines.

16 With Roblox itself allows a class of users, often called  
17 creators, to create games within the Roblox app. And those  
18 are added to Roblox and they're released as content within the  
19 app while it's live.

20 **Q.** We saw during our -- our tour of Fortnite different games  
21 in the creative mode. Did you see that?

22 **A.** I did.

23 **Q.** And I believe that Mr. Weissinger said that there were  
24 some hundreds of thousands of these player-created islands.  
25 Do you recall that generally?

**COOK - DIRECT - MOYÉ**

1                   **THE COURT:** All right. Let me just double check that  
2 I've got that line -- do we have that line working?

3                   **THE CLERK:** Yes, they said it's working.

4                   **THE COURT:** All right. Ms. Moyé, you may proceed.

5                   **MS. MOYÉ:** Thank you, Your Honor.

6                   **DIRECT EXAMINATION**

7                   **BY MS. MOYÉ:**

8                   **Q.** Good morning, Mr. Cook.

9                   **A.** Good morning.

10                  **Q.** Can I bring you some water? You may need some water  
11 during your testimony.

12                  Your Honor, can I approach the witness?

13                  **THE COURT:** You may.

14                  **THE WITNESS:** Thank you.

15                  **BY MS. MOYÉ:**

16                  **Q.** Mr. Cook, what is your current role at Apple?

17                  **A.** Chief executive officer.

18                  **Q.** And what are your responsibilities as chief executive  
19 officer?

20                  **A.** The overall direction and strategy of the company.

21                  **Q.** How long have you worked at Apple?

22                  **A.** Since 1998.

23                  **Q.** And under what circumstances did you come to work at  
24 Apple?

25                  **A.** I was working at Compaq Computer at the time, and I got a

**COOK - DIRECT - MOYÉ**

1 call out of the blue that Steve had come back to Apple and was  
2 essentially replacing the executive team, and he wanted to  
3 talk to me about being the operations chief.

4 **Q.** And are you referring to Mr. Steve Jobs?

5 **A.** Yes, of course.

6 **Q.** What other positions have you held at Apple, Mr. Cook?

7 **A.** Senior vice-president of worldwide operations, executive  
8 vice-president of sales and operations, and the chief  
9 operating officer.

10 **Q.** And when did you become CEO?

11 **A.** In 2011.

12 **Q.** What kind of oversight do you have over the App Store?

13 **A.** It's limited, obviously. In a review capacity is the way  
14 I would refer to it.

15 **Q.** Do you have a role with respect to strategic direction for  
16 the App Store?

17 **A.** I have a role in strategic direction of the company and so  
18 to some degree, but more on a review basis.

19 **Q.** Can you describe for us, Mr. Cook, your education and  
20 employment history?

21 **A.** Sure. Education is I have a Bachelor of Science in  
22 industrial engineering from Auburn University and a Master of  
23 Business Administration from Duke University.

24 My career started at IBM. I worked there for about a  
25 dozen years and then went to a small company called

**COOK - DIRECT - MOYÉ**

1 Intelligent Electronics in Denver for three years, and then to  
2 Compaq for a very short period of time before joining Apple.

3 **Q.** And where did you grow up, Mr. Cook?

4 **A.** In Robertsdale, Alabama.

5 **Q.** Robertsdale, you said?

6 **A.** Robertsdale.

7 **Q.** Mr. Cook, how would you describe Apple's mission?

8 **A.** It's to make the best products in the world that really  
9 enrich people's lives.

10 **Q.** And what do you do to try and meet that mission?

11 **A.** We do a number of things. We invest like crazy in R&D.  
12 We've invested a hundred billion dollars since -- since the  
13 start of the iPhone development, and -- and that number is  
14 just accelerated. In fact, we've invested 50 billion in the  
15 last three years.

16 In addition to that, we have a maniacal focus on the user,  
17 in doing the right thing by the customer. We integrate  
18 hardware, software, and services, and we think that we do that  
19 better than anyone else.

20 We take a lot of the complexity of technology away from  
21 the user and make things simple, not complex.

22 **Q.** Thank you, sir.

23 And what are the key commitments that Apple makes to its  
24 customers?

25 **A.** Simplicity, safety, security, privacy are key,

**COOK - DIRECT - MOYÉ**

1 what is in some food and so forth.

2 We also, several years ago, had Intelligent Tracking  
3 Prevention, which looks at your browsing traffic.

4 **Q.** And, sir, you mentioned that ATT, App Tracking  
5 Transparency, was just introduced.

6 **A.** Yes.

7 **Q.** When was the privacy nutrition label introduced?

8 **A.** It was introduced last fall, I believe.

9 **Q.** What about ITP?

10 **A.** I believe around three to four years ago, so probably in  
11 2017, the fall of 2017, I believe.

12 **Q.** How have developers responded to Apple's privacy  
13 initiatives?

14 **A.** Some applaud it and some are not happy with -- with it.

15 **Q.** And what do you do when a developer disagrees with your  
16 privacy initiatives?

17 **A.** Well, we listen. You know, we don't have a tin ear, but  
18 we're making decisions in the best interests of the user. And  
19 I -- I think it's important that -- that -- to know that  
20 sometimes there is a conflict between what the developer may  
21 want and what the user may want.

22 **Q.** And, sir, in your experience, how have consumers responded  
23 to Apple's commitments to safety, security, and privacy?

24 **A.** Overwhelmingly positive. The number of notes I get about  
25 the -- the actions we have taken are -- are truly, truly

**COOK - DIRECT - MOYÉ**

1 unbelievably positive.

2 **Q.** Do you also conduct consumer surveys to get customer  
3 feedback on these issues?

4 **A.** We do.

5 **Q.** And what do those surveys show?

6 **A.** They would show that it's a very key factor, one of the  
7 top factors of why people choose Apple.

8 **Q.** Let's turn to the development of the iPhone and the App  
9 Store.

10 Did Apple's safety, security, and privacy commitments  
11 impact development of the iPhone?

12 **A.** Oh, of course. When we launched the iPhone in 2007, there  
13 wasn't an App Store. And so the way that you would have --  
14 put an app on the phone was using a web app, instead of a --  
15 using the App Store.

16 And it wasn't until the following year that we figured out  
17 that we could implement such a process of app review that  
18 would allow us to let native apps on there without having the  
19 security and safety and privacy issues that go along with that  
20 if you -- if you do it without a review.

21 **Q.** How, sir, did the iOS system for the iPhone compare to the  
22 preexisting macOS system when the iPhone was introduced?

23 **A.** Well, it was different, you know. The -- of course, the  
24 internet existed when the iPhone was -- was brought out, and  
25 so there was many more things you could do.

**COOK - DIRECT - MOYÉ**

1 **A.** I think I saw an analysis at the time that -- that  
2 estimated the reduction in revenue that would take part --  
3 that would take place.

4 **Q.** Have competitors for the App Store responded to the  
5 commission reduction in the Small Business Program?

6 **A.** Yes.

7 **Q.** And how have they responded?

8 **A.** I think Google also lowered it to 15 percent for the  
9 developers underneath a million dollars, as one example.

10 I'm not sure about other app stores.

11 **Q.** Have you gotten feedback from developers on the commission  
12 structure, the 15 percent/30 percent commission structure?

13 **A.** Sure. People were universally pleased with the 30 to 15  
14 percent move on small developers. And, of course, I hear from  
15 some large developers that, Well, we'd like to pay less than  
16 30.

17 **Q.** Let's talk a little about the App Store's impact.

18 What has been the App Store's overall impact, in your  
19 view, sir?

20 **A.** I think it's been an economic miracle. When I think about  
21 the way it started, with just 500 apps, and then now at  
22 1.8 million and the number of jobs that it's created in the  
23 United States, there's almost 2 million people in the U.S.  
24 that are around the iOS job economy. And the level of  
25 commerce in the U.S. is \$138 billion, according to one study,



**COOK - DIRECT - MOYÉ**

1 In a regular accounting model, obviously, you would book  
2 the -- if it's a dollar, you would book a dollar, and then you  
3 would show the cost of the -- of the developer, which is 85  
4 percent in this case or 85 cents, going to the developer. And  
5 so it -- it's a consequence of accounting that isn't that  
6 obvious or intuitive.

7 **Q.** And in general, if one were comparing a company that  
8 reports on that agency or net basis and one that reports in  
9 what you said is the by-sale or regular basis, how would the  
10 margins compare for the same underlying economic facts?

11 **A.** Well, you couldn't compare them, really. They would not  
12 be comparable. You would have to go back and account for  
13 things in the same manner in order to make the numbers  
14 comparable.

15 When you book on a net basis, it has the effect of  
16 increasing the margin obviously because you're taking the bulk  
17 of the costs out and not showing it.

18 **Q.** Understood, sir.

19 And then I would just like to turn to an issue that the  
20 Court actually raised with us this morning, and it's the  
21 nature of the relief that Epic seeks.

22 Epic, in this case, seeks an order requiring Apple to  
23 permit sideloading of unreviewed apps on the iPhone and to  
24 permit alternative app stores that would offer apps that have  
25 not been reviewed by Apple.

**COOK - DIRECT - MOYÉ**

1           What, sir, would be the consequences of such an order, in  
2           your view?

3           **A.**    I think it would be terrible for the user because if you  
4           look at it today, we reviewed a hundred thousand or so apps a  
5           week and reject about 40,000 for different reasons. You can  
6           imagine if you turn review off how long it would take the App  
7           Store to just become a toxic kind of a mess. And that would  
8           be terrible for the user.

9           It would also be terrible for the developer because the  
10          developer depends on the store being a safe and trusted place  
11          where customers want to come and feel good about transacting.

12          **Q.**    What about Apple's IP rights? What impact would such a  
13          ruling have on Apple's IP rights?

14          **A.**    It -- it -- I -- this is probably more of a legal  
15          question, but it seems like it would be forcing us to license  
16          our IP, and I can't imagine that.

17          **Q.**    Does Apple license its iOS?

18          **A.**    No.

19          **Q.**    What would be the impact on Apple's ability to meet its  
20          commitments to its customers, the safety, security, and  
21          privacy commitments we talked about at the outset?

22          **A.**    We could no longer make the promise because the -- the --  
23          if you think about how we make the promise of safety,  
24          security, and privacy, a large part of that is -- depends on  
25          this app review. And we believe customers want that. I know

**COOK - DIRECT - MOYÉ**

1 they do because they tell me that.

2 **Q.** Epic also asked the Court to enter an order that provides  
3 Apple can no longer require developers to use IAP for  
4 purchases of digital goods.

5 What would be the consequences of that ruling?

6 **A.** Well, it would wind up where customers would then have to  
7 place their credit card in all of these different -- for all  
8 of these different apps, and so it would be a huge convenience  
9 issue but also the fraud risk would go up dramatically if you  
10 are taking your credentials and putting them in numerous  
11 times.

12 Also, we'd have to come up with an alternate way of  
13 collecting our commission. And I strongly believe that IAP is  
14 the most efficient way to collect it because you would then  
15 have to figure out how to track what's going on and invoice it  
16 and then chase the developer. It seems like a -- a process  
17 that doesn't need to exist to me.

18 **Q.** Thank you, sir.

19 Then I would just like to go back to the Data Transfer  
20 Project that the Court inquired about.

21 **MS. MOYÉ:** Your Honor, may I approach the witness to  
22 provide an exhibit?

23 **THE COURT:** Yes, you may.

24 **THE WITNESS:** Thank you.  
25